

PATENT

Please replace the paragraph beginning at page ~~4~~², line 4, with the following replacement paragraph:

B2
--The architecture of the Internet was devised about 20 years ago. Thus, the ATM (Asynchronous Transfer Mode) technique, i.e., a high-speed data communication technique developed through a recent technical advance, could not conventionally be efficiently used in Internet communication.--

Please replace the paragraph beginning at page 2, line 9, with the following replacement paragraph:

B3
--This invention has been made in view of the foregoing. It is the object of the invention to inhibit loss of information in the course of communication and to accomplish high-speed information communication by the use of the ATM technique.--

Please replace the paragraph beginning at page 3, line 5, with the following replacement paragraph:

B4
--In the present invention, information is transmitted in the band of a second reserved network, with reference to a mapping table, thereby to inhibit loss of the information while the information is being transmitted and also to achieve high-speed transmission of the information by the use of the ATM technique.--

Please replace the paragraph beginning at page 3, line 9, with the following replacement paragraph:

B5
--Further, information is transmitted in the band of the reserved network, with reference to the mapping table, whereby loss of the information can be inhibited while the information is being transmitted, and high-speed communication of the information can be performed by the use of the ATM technique. Still further, the time data contained in a packet is altered in accordance with the time lag between the first and second clock signals, thereby making it possible for different networks, which use asynchronous clock signals, to receive data from one another in real time.--

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Please replace the paragraph beginning at page 10, line 13, with the following replacement paragraph:

B6
--The high-speed resource-reserving protocol technique is to reserve at high speed a band (communication resource) for the line before data is transferred, thereby to transmit data with being interfered with by other communications. This technique makes effective use of the quality-assurance network technology for the connection base, which characterizes the asynchronous transfer mode (ATM). With this technique it is possible to send data reliably to the transfer destination, because the data is transmitted after the route to the destination is determined. In the high-speed resource-reserving protocol technique, the band is reserved for the required time only, and the reservation is canceled once the data has been transferred. Hence, the band can be used efficiently.--

Please replace the paragraph beginning at page 12, line 2, with the following replacement paragraph:

B7
--A translator 10-1 and a controller 11-1 constitute a home router 4-1. The translator 10-1 may be a general-purpose personal computer. As shown in FIG. 3, the translator 10-1 is connected to the controller 11-1 by a 10-base T cable 16-1 that is connected to an Ethernet cards 23 and 34. In response to a command supplied from the controller 11-1, the translator 10-1 transmits data to, or receives data from, the first network 1 through an optical fiber cable 15-1 that is connected to an ATM card 22. The translator 10-1 converts IP (Internet Protocol) data supplied from the first network 1, to DV data. The DV data is output to the DV terminal 25 of a DVCR 7-1 through a specific channel of an IEEE1394 bus 5-1-1. The translator 10-1 receives DV data (video data and audio data) input from a DV camera 8-1 via a specific channel of an IEEE1394 bus 5-1-2 connected to an IEEE1394 card 21, converts the DV data to IP data, and transmits the IP data to the first network 1. Further, the translator 10-1 controls the operation of the DVCR 7-1 and DV camera 8-1 by way of the IEEE1394 buses 5-1-1 and 5-1-2.--

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Please replace the paragraph beginning at page 15, line 14, with the following replacement paragraph:

B8 --The DV packets (A in FIG. 7) stored in a buffer 61 are put together, under the control of the CPU 41, making groups each consisting of one packet or more packets as is illustrated at B in FIG. 7. A sequential number is added to the head of each packet group. Further, as is shown at C in FIG. 7, an IP header indicating the address of the destination (the other end of the line) is added to each packet group having the sequential number at the head, on the basis of the mapping table 62 stored in the memory 50 and designed for transmitting packets. The packet group is then converted to an IP packet.--

Please replace the paragraph beginning at page 16, line 13, with the following replacement paragraph:

B9 --The IP packet transmitted from the other end of the line through the first network is stored into the network input cue 64 of the ATM interface 45. The IP packet stored in the network input cue 64 is transferred to the buffer 61 under the control of the CPU 41.--